

- | | |
|--|-----------------|
| <input type="checkbox"/> Cargo piping | 46 CFR 56.30 |
| <ul style="list-style-type: none"> • Expansion joints • Controls • Supports • Hoses-drip pans • Valves | 46 CFR 56.35 |
| <input type="checkbox"/> Cargo tank venting | 46 CFR 56.20 |
| Independent PV valves | 46 CFR 70.05-30 |
| Independent goosenecks | 46 CFR 90.05-35 |
| <ul style="list-style-type: none"> • Flame screen • Closure device | |
| <input type="checkbox"/> Explosion-proof fixtures | 46 CFR 111.105 |
| <input type="checkbox"/> Independent tanks, fixed, portable, or marine portable | 46 CFR 98.30 |
| <ul style="list-style-type: none"> • External examination • Date of internal examination _____ • Date of hydrostatic test _____ • Metal information plate • Marking and labeling • Saddles; foundation and stowage • Piping and valves • Relief valves • Lifting fittings • Securing devices • Pump and controls • Cargo hose • Electrical grounding • Firefighting requirements • Authorized cargo | |

Notes: _____

Ground Tackle:

- | | |
|---|------------------------------|
| <input type="checkbox"/> Anchors | 46 CFR 77.07
46 CFR 96.07 |
| <ul style="list-style-type: none"> • Tested • Windlass • Capstans – Automatic tensioning device | |
| <input type="checkbox"/> Mooring, standing and running gear (other than gear covered by Cargo Gear Certificate) | 46 CFR 91.37-70 |

Lifesaving Equipment:

NOTE: Exemptions and alternatives for vessels not subject to SOLAS can be found in 46 CFR 199.600.

- | | |
|--|--|
| <input type="checkbox"/> General alarms | 46 CFR 113.25
SOLAS 74/78 III/6.4 |
| <ul style="list-style-type: none"> • Controls • Batteries and fuses • Tested • Markings • Bell locations audible | |
| <input type="checkbox"/> Type of lifeboat | |
| Davit launched | |
| Free fall | |
| <input type="checkbox"/> Lifeboats stripped, cleaned and inspected | 46 CFR 199.190(f) |
| <ul style="list-style-type: none"> • Date of annual servicing _____ | |
| <input type="checkbox"/> Lifeboats and work boats | 46 CFR 199.201
46 CFR 199.202
46 CFR 199.261
46 CFR 199.262
SOLAS 74/78 III/19.2
SOLAS 74/78 III/26
MSM Ch. C2.H.2 |
| <ul style="list-style-type: none"> • Hull and fittings • Tanks and fittings • Cradles • Gripes • Compressed air cylinders • Markings | 46 CFR 199.176 |

Notes: _____

- | | | |
|--------------------------|--|---|
| <input type="checkbox"/> | Guards, ladders, rails, and gangways (including accommodation ladders or pilot ladders) | 46 CFR 72.40
46 CFR 92.25
ICLL 66 Reg. 25 |
| <input type="checkbox"/> | Elevators and escalators | 46 CFR 72.05-20
46 CFR 111.91 |
| <input type="checkbox"/> | Watertight doors in subdivision bulkhead tested by: | 46 CFR 170.270 |
| | <ul style="list-style-type: none"> • Local control by hand • Local control by power • Remote control by hand <ul style="list-style-type: none"> – Indicators • Remote control by power <ul style="list-style-type: none"> – Indicators | |
| <input type="checkbox"/> | Cargo gear examined (in absence of Cargo Gear Certificate) | 46 CFR 91.37 |
| | <ul style="list-style-type: none"> • Records • Safe Working Load markings | |
| <input type="checkbox"/> | Exercise valves and controls | 46 CFR 78.17-5 |
| | <ul style="list-style-type: none"> • Bilge valves • Overboard discharge valves • Equalizing valves • Emergency shutoff valves • Scupper valves • Remote control • Reach rods | |
| <input type="checkbox"/> | Bilge wells, cofferdams, and suctions | 46 CFR 56.50-50 |
| <input type="checkbox"/> | Bulkhead penetrations | MSM Ch. B1.E.6 |
| <input type="checkbox"/> | Piping protection | MSM Vol. IV, Ch. 3.G.2.b |
| | <ul style="list-style-type: none"> • Removable guards (where required) • Cargo hold • Baggage spaces | |

Notes: _____

Item Number	Item	International Voyage		Short International Voyage	
		Lifeboat	Rescue Boat	Lifeboat	Rescue Boat
29	Signal, smoke	2		2	
30	Signal, hand flare	6		6	
31	Signal, parachute flare	4		4	
32	Skates and fenders ⁸	1	1	1	1
33	Sponge ⁷		2		2
34	Survival instructions	1		1	
35	Table of lifesaving signals	1		1	
36	Thermal protective aids ⁹	10%	10%	10%	10%
37	Tool kit	1		1	
38	Tow line ¹⁰	1	1	1	1
39	Water (liters/person)	3		3	
40	Whistle	1	1	1	1

Footnotes:

1 Each rigid liferaft equipped for 13 persons or more must carry two of these items.

2 Not required for boats of self-bailing design.

3 Not required for inflated or rigid-inflated rescue boats.

4 A hatchet counts towards this requirement in rigid rescue boats.

5 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.

6 Rescue boats may substitute buoyant paddles for oars, as specified by the manufacturer.

7 Not required for a rigid rescue boat.

8 Required if specified by the boat manufacturer.

9 Sufficient thermal protective aids are required for at least 10% of the persons the survival craft is equipped to carry, but not less than two.

10 Required only if the lifeboat is also the rescue boat.

Notes: _____

- ☐ EPIRB (406 MHz)
 - Float-free arrangement
 - Battery date current
 - Hydrostatic release
 SOLAS 74/78 IV/7.1.6
46 CFR 199.510
- ☐ GMDSS lifeboat radios (VHF)
 - 3 if over 500 GT
 - Operable condition
 SOLAS 74/78 III/6.2
- ☐ 9 GHz radar transponder (SART)
 - Freight vessels > 300 GT and < 500 require 1
 - Freight vessels > 500 GT and passenger vessels require 2
 - Stowed so to be rapidly placed in survival craft or stowed in survival craft
 SOLAS 74/78 III/6.2
NVIC 9-93
- ☐ NAVTEX
 -
 SOLAS 74/78 IV/7.1.4

General Health and Safety:

- ☐ Hospital and first aid equipment
 -
 46 CFR 72.20-35
46 CFR 92.20-35
- ☐ Operating room explosion-proof
 -
 46 CFR 111.105-37
- ☐ Emergency lighting
 -
 46 CFR 112.43
- ☐ Protection of spaces specially suited for vehicles
 - Gas detection systems
 - Electrical hazardous locations
 46 CFR 70.10-44
46 CFR 90.10-38
- ☐ Crew and passenger accommodations
 - Size
 -
 46 CFR 72.20
46 CFR 72.25
46 CFR 92.20
 - Lighting and wiring
 - Heating
 - Ventilation
 -
 46 CFR 92.15-15
 - Sanitation
 - Screens
 - Insulation
 - Fire retardant

Notes: _____

- ☐ Lifeboat winches
 - Brakes
 - Controls
 - Cranks
 - Covers
 - Limit switches and electrical controls
 46 CFR 199.199(i)
SOLAS 74/78 III/19
MSM Ch. C2.H.6
- ☐ Embarkation aids
 - Ladders
 - Access
 - Spans and lifelines
 - Illumination
 - Frapping and tricing lines
 46 CFR 199.190(f)
SOLAS 74/78 III/11
- ☐ Lifeboat weight test
 - Light load
 - Full load: date _____
 46 CFR 199.45(b)
SOLAS 74/78 III/19
MSM Ch. B1.P
- ☐ Liferafts
 - Launching instructions posted
 - Equipment and stowage
 - Annual service dates
 -
 -
 -
 46 CFR 199.190
SOLAS 74/78 III/19
SOLAS 74/78 III/26
MSM Ch. C2.H.3
46 CFR 199.190(g)
 - Hydro release service dates
 -
 -
 -
 46 CFR 199.190(h)
MSM Ch. C2.H.3
 - Weak link
 - Float free
 - Illumination
 - Markings
 - Capacities
 - Launching devices tested
 -
 MSM Ch. C3.H.3

Notes: _____

Section 3: Inspection Items

Navigation Equipment:

- | | |
|---|---|
| <input type="checkbox"/> Navigation publications (as applicable) | 33 CFR 164.33
SOLAS 74/78 V/20 |
| <ul style="list-style-type: none"> • Current and corrected charts • U.S. Coast Pilot • Great Lakes Pilot • Sailing directions • Coast Guard Light List • Notice to mariners • Tide tables • Tidal current tables • International Rules of the Road • Inland Rules of the Road | |
| <input type="checkbox"/> Operationally test radar(s) and ARPA | 33 CFR 164.35
33 CFR 164.37
33 CFR 164.38
SOLAS 74/78 V/12 |
| <ul style="list-style-type: none"> • 2 required if over 10,000 GT • Operate independently • ARPA acquires targets | |
| <input type="checkbox"/> Compasses | 33 CFR 164.35
SOLAS 74/78 V/12 |
| <ul style="list-style-type: none"> • Illuminated gyrocompass with repeater at stand • Illuminated magnetic compass • Current deviation table | |
| <input type="checkbox"/> Test electronic depth sounding device and recorder | 33 CFR 164.35
SOLAS 74/78 V/12 |
| <ul style="list-style-type: none"> • Accurate readout • Test all transducers • Continuous recorder (chart) | |
| <input type="checkbox"/> Speed and distance indicator | 33 CFR 164.40
SOLAS 74/78 V/12 |
| <input type="checkbox"/> Propulsion shaft tachometer | SOLAS 74/78 V/12 |

Notes: _____

- | | |
|--|--------------------------------------|
| <input type="checkbox"/> Placard of lifesaving signals | 46 CFR 97.43
SOLAS 74/78 V/16 |
| <input type="checkbox"/> Pilot ladder and hoists in good condition | SOLAS 74/78 V/17 |
| <input type="checkbox"/> Station bill posted | 46 CFR 199.80
SOLAS 74/78 III/8.3 |

Fire Protection Equipment:

- | | |
|---|--|
| <input type="checkbox"/> Fire control plan | 46 CFR 78.45-1
46 CFR 97.36-1
SOLAS 74/78 II-2/20 |
| <ul style="list-style-type: none"> • Permanently posted • Copy permanently stored in weathertight container outside deckhouse | |
| <input type="checkbox"/> Patrol system | 46 CFR 78.30-10
46 CFR 78.30-15
46 CFR 95.05-1 |
| <ul style="list-style-type: none"> • Stations properly numbered and sealed • Key clock charts | |
| <input type="checkbox"/> Fire detection systems | 46 CFR 76.05-1
46 CFR 95.05-1
SOLAS 74/78 II-2/13
SOLAS 74/78 II-2/11.8
SOLAS 74/78 II-2/53
NVIC 7-80 |
| <ul style="list-style-type: none"> • Smoke / fire alarms • Remote pull stations • Smoke / flame / heat detectors and sensors | |
| <input type="checkbox"/> Portable extinguishers | 46 CFR 76.50
46 CFR 95.50
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. C2.I.3
NVIC 7-70
NVIC 13-86 |
| <ul style="list-style-type: none"> • Serviced annually • Bottles hydrostatically tested (every 5 years) • Markings (weight and hydrostatic test date) • Spare charges, spare extinguishers | |
| <input type="checkbox"/> Semiportable extinguishers | 46 CFR 76.50
46 CFR 95.50
SOLAS 74/78 II-2/6
SOLAS 74/78 II-2/21
MSM Ch. C2.I.4 |
| <ul style="list-style-type: none"> • Serviced annually • Bottles hydrostatically tested (every 12 years) • Controls, instructions, markings • Hose and diffuser • Flexible loops tested or replaced (same as bottle) | |

Notes: _____

Logs and Manuals:

- ☐ Lifesaving equipment maintenance record 46 CFR 199.190(e)
SOLAS 74/78 III/19
 - Periodic checks as required
 - Visual inspection of survival craft / rescue boat and launching appliances
 - Operation of lifeboat / rescue boat engines
 - Lifesaving appliances, including lifeboat equipment examined
- ☐ Emergency training and drills SOLAS 74/78 III/18
 - Onboard training in use of lifesaving equipment (all crew members)
 - SOLAS training manual
 - Logbook records 46 CFR 199.180
 - Fire and lifeboat drills SOLAS 74/78 III/18.5
 - General alarm tested SOLAS 74/78 III/25
- ☐ Bridge log SOLAS 74/78 V/19
STCW 95 I/14
33 CFR 164.25
33 CFR 164.53
 - Pre-arrival tests conducted
 - Casualties (navigation equipment and steering gear failures reported)
 - Steering gear drills 46 CFR 97.35
 - Emergency steering drills
- ☐ Stability information 46 CFR 78.17-20
46 CFR 97.15-5
SOLAS 74/78 II-1/22.1
- ☐ Information available to master (as required) 46 CFR 78.17-22
46 CFR 97.12-1
 - Loading manual
 - Trim and stability book

Pollution Prevention Records:

- ☐ Oil record book (Part 1) MARPOL Ax. I/20
33 CFR 151.25
 - Each operation signed by person-in-charge
 - Each complete page signed by master
 - Book maintained for 3 years

Notes: _____

- ☐ Passenger vessels: structural fire protection 46 CFR 72.05
SOLAS 74/78 II-2/23
 - Draft stops
 - Fire dampers
 - Bulkheads
 - Insulation
 - Ventilation
 - Penetrations
- ☐ Cargo and miscellaneous vessels: structural fire protection 46 CFR 92.07
SOLAS 74/78 II-2/42
 - Bulkheads
 - Insulation
- ☐ Fire doors and controls tested 46 CFR 72.05-25
46 CFR 92.07-10
SOLAS 74/78 II-2/46
SOLAS 74/78 II-2/47
 - Machinery space and stair towers
 - Not tied or blocked open
 - Installed closure devices working
- ☐ Remote controls to power ventilation marked and tested 46 CFR 111.103-1
- ☐ Closures for spaces protected by fixed smothering systems 46 CFR 76.15-35
46 CFR 95.15-35
- ☐ International shore connection 46 CFR 76.10-10(c)
46 CFR 95.10-10(c)
SOLAS 74/78 II-2/19

Pollution Prevention:

- ☐ Pollution placard posted 33 CFR 155.450
- ☐ MARPOL V placard posted 33 CFR 151.59
- ☐ Person-in-charge designation 33 CFR 155.700

Notes: _____

Vessel Information:

Classification Society	
ISM Issuer: Same as above?	
Yes	No If not the same, which Recognized Organization? _____
<p>NOTE: The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.</p> <p> <input type="checkbox"/> 5 years = Full term (SMS and DOC) <input type="checkbox"/> 12 months = Interim (DOC) <input type="checkbox"/> 6 months = Interim (SMC) <input type="checkbox"/> 5 months = Short term (SMC) </p>	
Gross Tons	No Change (VFMD)
Net Tons	No Change (VFMD)
Built Date (use delivery date)	No Change (VFCD)
Overall Length (in feet)	No Change (VFMD)

Vessel Description:

Container Vessel

Vehicle Carrier

Bulk Carrier

Passenger Vessel

Research Vessel

School Ship

Other

Section 5: Appendices

Recommended US Vessel Deficiency Procedures:

Step	Action								
1	Identify deficiency.								
2	Inform vessel representative.								
3	Record on the <i>Deficiency Summary Worksheet</i> (next page).								
4	If deficiency is corrected prior to end of inspection, go to Step 7.								
5	<p>If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below.</p> <table border="1"> <tr> <th>IF deficiency:</th><th>THEN issue CG-835:</th></tr> <tr> <td> <p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> Missing placards Non-metallic expansion joints more than 10 years in service </td><td> <p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> "X" number of days At next drydock </td></tr> <tr> <td> <p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Expired international certificates Automation defect Insufficient lifesaving equipment </td><td> <p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> Reduced route Increased crew Fewer passengers </td></tr> <tr> <td> <p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Missing or defective firefighting equipment Structural defect or damage </td><td> <p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> Prior to carrying passengers Prior to carrying cargo </td></tr> </table>	IF deficiency:	THEN issue CG-835:	<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> Missing placards Non-metallic expansion joints more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> "X" number of days At next drydock 	<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Expired international certificates Automation defect Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> Reduced route Increased crew Fewer passengers 	<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Missing or defective firefighting equipment Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> Prior to carrying passengers Prior to carrying cargo
IF deficiency:	THEN issue CG-835:								
<p>Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,</p> <ul style="list-style-type: none"> Missing placards Non-metallic expansion joints more than 10 years in service 	<p>That provides a specific time for correcting deficiency, e.g.,</p> <ul style="list-style-type: none"> "X" number of days At next drydock 								
<p>Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Expired international certificates Automation defect Insufficient lifesaving equipment 	<p>That restricts operation of vessel to meet current vessel conditions, e.g.,</p> <ul style="list-style-type: none"> Reduced route Increased crew Fewer passengers 								
<p>DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,</p> <ul style="list-style-type: none"> Missing or defective firefighting equipment Structural defect or damage 	<p>That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,</p> <ul style="list-style-type: none"> Prior to carrying passengers Prior to carrying cargo 								
6	Enter CG-835 data in MIDR.								
7	Enter deficiency data in MSDS.								
8	Initiate Report of Violation (ROV) if necessary.								

IMO Applicability Dates:

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974	01 MAY 81
1981 Amendments (II-1 & II-2)	01 SEP 84
1983 Amendments (III)	01 JUL 86
<i>Various additional amendments to SOLAS</i>	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
<i>Various additional amendments to COLREGS</i>	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments	01 JAN 96
1995 Amendments	01 FEB 97

[illegible]

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

MSIS Codes for Deficiencies:

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
BI	Bilge	ES	Electrical	LS	Lifesaving
BA	Boiler, Aux.	FF	Firefighting	MI	Miscellaneous
BM	Boiler, Main	FL	Fuel	NS	Navigation
CS	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	HA	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		

Notes:

Total Time Spent Per Activity:

Regular Personnel (Active Duty)			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Reserve Personnel			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS
-------------------	--------------------

Auxiliary Resources	
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS

Conversions:

Distance and Energy				
Kilowatts (kW)	X	1.341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)
Liquid (NOTE: Values are approximate.)				
Liquid	bbl/LT	m ³ /t	bbl/m ³	bbl/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heavy Oil	6.77	1.06	6.66	7.06
DFM	6.60	1.19	7.48	8.91
Lube Oil	7.66	1.20	7.54	9.05
Weight				
1 Long Ton	=	2240 lbs	1 Metric Ton	= 2204 lbs
1 Short Ton	=	2000 lbs	1 Cubic Foot	= 7.48 gal
1 Barrel (oil)	=	5.61 ft = 42 gal = 6.29 m ³	1 psi	= .06895 Bar = 2.3106 ft of water
Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F – 32))				
0	=	-17.8	80	= 26.7
32	=	0	90	= 32.2
40	=	4.4	100	= 37.8
50	=	10.0	110	= 43.3
60	=	15.6	120	= 48.9
70	=	21.1	150	= 65.6
200	=	93.3	250	= 121.1
300	=	148.9	400	= 204.4
500	=	260	1000	= 537.8
Pressure: Bars = Pounds per square inch				
1 Bar	=	14.5 psi	5 Bars	= 72.5 psi
2 bars	=	29.0 psi	6 Bars	= 87.0 psi
3 Bars	=	43.5 psi	7 Bars	= 101.5 psi
4 Bars	=	58.0 psi	8 Bars	= 116.0 psi
9 Bars	=	130.5 psi	10 Bars	= 145.0 psi